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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/714,217      | 11/14/2003  | Paul Edward Smith    | 0512-01UA           | 2558             |

21704 7590 02/08/2007  
LAW OFFICES OF ERIC KARICH  
2807 ST. MARK DR.  
MANSFIELD, TX 76063

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| EXAMINER |
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MARC, MCDIEUNEL

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3661

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 31 DAYS                                | 02/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/714,217

Applicant(s)

SMITH ET AL.

Examiner

McDieunel Marc

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 4-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>1291/2007</u> .                                   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 1-23 are presented for examination.
2. Applicant's representative has elected group I.

3. Restriction is required under 35 U.S.C. 121:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I. Claims 1-3, drawn to a system for conveying a specimen-bearing grid, classified in class 700, subclass 254.

Group II. Claims 4-16, drawn to a system for inserting a specimen-containing holder, classified in class 700, subclass 220.

Group III. Claims 17-20, drawn to a tray for storing a plurality of specimen grid, classified in class 700, subclass 245.

Group IV. Claims 21-23, drawn to a probe station for loading a specimen-bearing grid into a holder, classified in class 318, subclass 568.1.

4. Inventions I-IV are related as combination/subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require

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the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the details of the subcombination are not set forth in the combination. The subcombination has utility such as inserting a specimen..., the inventions are distinct and restriction is PROPER. See MPEP § 806.05(c).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Upon election of invention I, II, III or IV, the applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which  
Upon election of invention I, II, III or IV the applicant is further required under 35 the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claims appear to be generic):

- A. The embodiment of figure 1.
- B. The embodiment of figure 2.
- C. The embodiment of figure 3.
- D. The embodiment of figure 4.
- E. The embodiment of figure 5a.
- F. The embodiment of figure 5b.
- G. The embodiment of figure 6.
- H. The embodiment of figure 7.

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7. Applicant is advised that a reply to this requirement must include in identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in depend form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02 (a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence or admission by be used in rejection under U.S. C. (a) of the other invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least on claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17 (i).

9. A telephone call was made to Mr. Karich, Eric, Registration No. 41,503, ((800)949-0255)) on 1/29/2007 to request an oral election to the above restriction requirement, and group I has been elected. Applicant is advised that the reply to this requirement to be complete must

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include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by **Bacchi *et al.*** (U.S. 6256555, Bacchi *et al.* herein after).

As per claim 1, **Bacchi *et al.*** system for conveying a specimen-bearing grid from a first location to a second location (see the abstract, particularly “Robot arm (16) end effectors (10, 110) of this invention rapidly and cleanly transfer between a wafer cassette (14) and a processing station semiconductor wafers (12)”), note that the wafer being considered as the grid, the system comprising:

a robotic arm (see abstract, particularly robot arm (16) and fig. 1, element 16);

an end effector attached to an end of the robotic arm and comprising a gripper apparatus adapted to grip the grid (see abstract, particularly “semiconductor wafers (12) having diameters greater than 150 mm. The end effectors include proximal and distal rest pads (24, 26, 124,126) having pad and backstop portions (32, 34, 132, 134) that support and grip the wafer within an annular exclusion zone (30) that extends inward from a peripheral edge (30) of the wafer.” and fig. element); and

a control means operably connected to the robotic arm and to the gripper apparatus and configured to control the robotic arm and the gripper apparatus (see col. 5, lines 57-56, “The vacuum pressure acts through drive chamber 60 against the front face of piston 52 to extend active contact point 50 to the wafer-gripping position and acts through return chamber 62 against the back face of piston 52 to retract active contact point 50 as controlled by the programmable control. The vacuum pressure source is routed to first and second channels 64 and 66 through rotary vacuum communication spools in robot arm 16.”), note that robotic performs under a programmable control system, and such control being taken as connected to the robotic arm, such that the gripper apparatus grips the grid at the first location and the robotic arm conveys the gripped grid from the first location to the second location (see col. 1, line 65 – to – col. 2, line - 2, “a specimen gripping end effector that can securely, quickly, and, accurately transfer 150 mm diameter and larger semiconductor wafers to and from a cassette while minimizing backside damage and silicon particle contamination.”).

As per claim 2, Bacchi et al. teaches a system, wherein the gripper apparatus comprises a pair of opposed fingers coupled to at least one actuator (see fig. 1, elements 52, 152 and element 14 wherein each side being taken for opposite fingers).

As per claim 3, Bacchi et al. teaches a system, wherein the grid is substantially disk shaped and comprises an outer edge surface (see fig. 1, element 18), and wherein each of the opposed fingers comprises a "V"-shaped notch adapted to engage the outer edge surface of the grid (see fig. 1, element 14 wherein each side being taken for “V”-shaped opposite fingers).

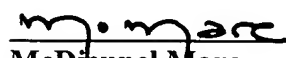
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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964.


The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
McDieunel Marc

Saturday, January 27, 2007  
MM/

  
**THOMAS BLACK**  
**SUPERVISORY PATENT EXAMINER**